

U.S.S.N. 10/709,900

2

81093148

In the specification:

Please amend the specification as follows:

[0024] The lane change system 12 provides an indication to the host vehicle driver as to the entering of a target vehicle within at least one of the destination lanes 14, 15 or within a close proximity to the host vehicle 10. The system 12 includes a vehicle bus 39 receiving various vehicle control signals ~~[[32]]~~37, magneto-resistive sensors 11, 13, 16, 17, 18, 19 receiving proximity information 34, a smart algorithm controller 36 (digital signal processor and smart algorithms), a vehicle warning interface 38, and various vehicle collision systems such as passive restraints 40, optical light guides 42, and audible warnings 44. All of these devices will be discussed later.

[0030] The lane change system 12 provides an indication to the host vehicle driver as to the entering of a target vehicle within at least one of the destination lanes 14, 15 or within a close proximity to the host vehicle 10. The system 12 includes a vehicle bus 39 receiving various vehicle control signals ~~[[32]]~~37, magneto-resistive sensors 11, 13, 16, 17, 18, 19 receiving proximity information 34, a smart algorithm controller 36 (digital signal processor and smart algorithms), a vehicle warning interface 38, and various vehicle collision systems such as passive restraints 40, optical light guides 42, and audible warnings 44. All of these devices will be discussed later.

[0039] The vehicle bus 39 receives various vehicle control signals ~~[[32]]~~37 and generates therefrom vehicle status data. Sensors and control units generating vehicle control signals include, for example, a vehicle type information unit 77 generating vehicle type information, vehicle speed sensors 78 generating vehicle speed signals, an RPM (revolutions per minute) reader 80 generating RPM signals, a heading indicator 82 generating a heading of host vehicle signal, a location indicator 84 such as a GPS system generating a location of vehicle signal, a directional signal generator 86 generating a host vehicle directional signal (e.g. left, right, heading), a steering wheel angle sensor 88 generating a steering wheel angle signal, and a brake status sensor 90 generating a brake status signal. One skilled in the art will realize that the vehicle bus 39 may also receive various other sensor and control signals.

U.S.S.N. 10/709,900

3

81093148

[0042] In operation block 104, the vehicle gateway bus 39 receives vehicle control signals [[32]]37 and generates therefrom a vehicle bus signals.